IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application No.:	10/781,865	Confirmation No.: 5066
Applicant:	Hong-Jin AHN	
Filed:	October 15, 2002	
TC/A.U.:	2444	
Examiner:	Muktesh G. Gupta	
Docket No.:	45823	
Customer No.:	01609	

For: Apparatus and Method for Performing Traffic Flow Template Packet Filtering According to Internet Protocol Versions in a Mobile Communication System

REPLY BRIEF UNDER 37 CFR § 41.41(a)(1)

United States Patent and Trademark Office
Customer Service Window, Mail Stop Appeal Brief - Patents
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Alexandria, VA 22314

Sir:

For the appeal to the Board of Patent Appeals and Interferences from the decision of June 16, 2008 rejecting claims 1, 7, 12-18 and 23-28 in the above-identified application, Appellant submits the following reply brief in response to the Examiner's Answer of May 11, 2009, in accordance with 37 C.F.R. § 41.41(a)(1).

No fees are believed to be required with this reply. However, should any fees be required, the Director is hereby authorized to charge the required fees to Deposit Account No. 18-2220.

I. Status of Claims

There is no dispute as to the status of the claims as set forth in the January 12, 2009

Appeal Brief, and noted as being correct in the May 11, 2009 Examiner's Answer.

II. **Ground of Rejection on Appeal**

There is no dispute as to the grounds of rejection on appeal as set forth in the January 12, 2009 Appeal Brief, and noted as being correct in the May 11, 2009 Examiner's Answer.

III. Reply to Examiner's Answer of May 11, 2009

I.

With respect to claim 1, as pointed out in Appellant's Appeal Brief of January 12, 2009 (hereinafter "the Appeal Brief"), Jouppi's teaching of an interface identifier as well as its system of using the interface identifier in TFT filtering, does not teach or suggest *"extracting a first IP version address from a source second IP version address, wherein the second IP version address contains the first IP version address"*, and *"generating TFT information using the first IP version address, wherein the TFT information contains an indication that the second IP version address contains the first IP version address"* (hereinafter referred to "the above-quoted steps"), as recited in claim 1.

In the Examiner's Answer, the Examiner uses three full pages (pages 13-15) (hereinafter "the 3-page response") to detail how Jouppi's TFT-filtering system works, including how Jouppi's system allocates an interface identifier or extracts an interface identifier from an IPv6 address, how the framework of TFT filtering generally functions, and how Jouppi's system uses the interface identifier in TFT filtering. *However, what is notably missing in the 3-page response is how those alleged facts relating to Jouppi's TFT-filtering system teach or suggest the above-quoted steps.*

It is unclear whether the Examiner is attempting to show that Jouppi's interface identifier is analogous to the first IP version address (extracted from the source second IP version address) as claimed, and also that Jouppi's TFT-filtering system using the interface identifier is analogous to the above-quoted steps recited in claim 1. Nonetheless, as will be analyzed below, these alleged details (of Jouppi's TFT-filtering system) do not demonstrate any analogy between Jouppi's interface identifier and the first IP version address as claimed,

nor any analogy between Jouppi's TFT-filtering system and the above-quoted steps. Thus, the alleged details of Jouppi's TFT-filtering system relied upon by the Examiner do not teach or suggest the claimed invention for reasons stated below.

First, Jouppi's interface identifier is not analogous to the first IP version address (extracted from the source second IP version address) as claimed. Specifically, according to Jouppi, an interface identifier is not an IP address, but rather a 64-bit suffix (to a 128-bit IPv6 address of a mobile station) either pre-allocated to the mobile station or extracted from the IPv6 address, and is used only for TFT-filtering packets. By contrast, the first IP version address is *an IP address* (formed in accordance with the first IP version) and used for TFT-filtering IP addresses. Accordingly, Jouppi's interface identifier is not analogous to the first IP version address as claimed, as the Examiner appears to suggest. Thus, Jouppi fails to teach or suggest the claimed invention.

Second, Jouppi's TFT-filtering system (using the interface identifier) is also not analogous to the above-quoted steps as a whole.

More specifically, Jouppi's TFT-filtering system is operable to *TFT-filter out packets* that do not match a particular interface identifier used in TFT filters so as to distinguish malicious packets from bona-fide packets. On the other hand, the above-quoted steps are operable to *TFT-filter IP addresses*, rather than *TFT-filter packets* as disclosed in Jouppi. Additionally, the above-quoted steps are operable to, during the process of TFT-filtering IP addresses, turn the otherwise more load intensive bit computation associated with the second IP version address (e.g., Ipv6 address) into the less load-intensive bit computations associated with the first IP version address (e.g. IPv4 address), thereby advantageously drastically reducing the bit-computation load involved therein. Accordingly, Jouppi's TFT-filtering

system and the above-quoted steps perform very different and non-analogous functions and achieve very different results. Thus, Jouppi fails to teach or suggest the claimed invention.

In addition, the above-quoted steps comprise "wherein the TFT information <u>contains an indication</u> that the second IP version address contains the first IP version address". By contrast, nowhere does Jouppi disclose its TFT-filtering system as involving TFT information <u>containing an indication</u> that the second IP version address contains the first IP version address. Accordingly, Jouppi's TFT-filtering system and the above-quoted steps use very different ways to perform their respective functions. Thus, Jouppi fails to teach or suggest the claimed invention.

In summary, as analyzed above, Jouppi's interface identifier is not analogous to the first IP version address extracted from the second IP version address as claimed. Nor is Jouppi's TFT-filtering system using the interface identifier analogous to the above-quoted steps recited in claim 1. Hence, the Examiner's alleged details of Jouppi's TFT-filtering system do not teach or suggest the invention recited in claim 1. Further, as detailed in the Appeal Brief, Krishnarajah does not cure the above-noted deficiencies of Jouppi with respect to the above-quoted steps recited in claim 1. Accordingly, claim 1 should be allowable over Jouppi and Krishnarajah. The rejection of claim 1 should be withdrawn.

<u>II.</u>

With respect to claim 1, in the Appeal Brief, Appellant also points out that the Examiner's grounds of rejection using Jouppi and Krishnarajah are largely not directed to the subject matter recited in claim 1. For example, in the Appeal Brief, Appellant points out that the Examiner's assertion that Jouppi teaches "extracting *a first IP version address based information* from a source second IP version address, .." is not directed to the very subject matter recited in claim 1, given that claim 1 recites "extracting *a first IP version address* from

a source second IP version address,...". Therefore, as Appellant argues, the assertion, even if true, which in fact is not, has no bearing on the patentability of the subject matter recited in claim 1.

Appellant submits that, for the most part, in the Examiner's Answer, the Examiner fails to address most of the arguments set forth by Appellant in the Appeal Brief that relate to the relevancy of the Examiner's assertions to the subject matter recited in claim 1. The only such argument of Appellant that the Examiner seems to address is the one that concerns the paragraph of Krishnarajah at in col. 14, lines 38-57. With respect to that paragraph, the Examiner, in essence, counter-argues that, in accordance with Krishnarajah's teaching, "once the IP packet is identified as an IPv6 and/or IPv4 packet, in other words, extracting the version of an IP packet, whether identified through an interface identifier and/or flow identifiers, traffic flow template filtering (TFT) can be applied to IP packets based on these parameters for extraction of IPv6 and IPv4 address". See the first paragraph on page 17 of the Examiner's Answer. However, as stated above, the alleged teaching of *"extracting the version of an IP packet"* or the alleged teaching of *"traffic flow template filtering (TFT) can be applied to IP packets based on these parameters for extraction of IPv6 and IPv4 address"* does not teach or suggest the recitations of claim 1. More specifically, claim 1 does not recite "extracting the version of an IP packet", as the Examiner alleges. Rather, claim 1 recites "extracting *a first IP version address* **from** *a source second IP version address*". Similarly, claim 1 does not recite "applying TFT to IP packets based on parameters used for extracting *a second IP version address (such as IPv6)* and parameters used for extracting *a first IP version address (such as IPv4)*", as the Examiner alleges. Rather, claim 1 recites "generating TFT information using the first IP version address, wherein the TFT information **contains an indication** that *the second IP version address contains the first IP version address*".

Therefore, Appellant respectfully submits that the rejection of independent claim 1 is improper and should be withdrawn.

Independent claims 7, 17 and 23, as detailed in the Appeal Brief, contain subject related to that claim 1. Therefore, their rejection should likewise be withdrawn. The rejection of claims 12-16, 18 and 24-28 should be withdrawn at least by virtue of their dependency from one or more of allowable claims 1, 7, 17 and 23 respectively.

III.

For the reasons presented herein, as well as arguments advanced in the Appeal Brief, Appellant respectfully submit that claims 1, 7, 12-18 and 23-28 are not unpatentable over Jouppi in view of Krishnarajah under 35 U.S.C. § 103(a). Accordingly, the reversal of the final rejection is requested and allowance of claims 1, 7, 12-18 and 23-28 is respectfully requested.

Respectfully submitted,

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